THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte BENJAMIN J. MOSTKOFF

_____

Appeal No. 96-3404
Application 08/145,775[1]

_____

ON BRIEF

_____

Before MEISTER, FRANKFORT and McQUADE, ***Administrative Patent Judges***.

MEISTER, ***Administrative Patent Judge***.

DECISION ON APPEAL

---

[1]Application for patent filed October 29, 1993. According to appellant, this application is a Continuation-In-Part of application 07/948,159, now U.S. Patent 5,259,695, issued November 9, 1993, which is a Continuation of application 07/800,857, now abanoned.

Benjamin J. Mostkoff (the appellant) appeals from the final rejection of claims 1-16, the only claims present in the application.

The appellant's invention pertains to (1) an artificial reef module, (2) an artificial reef module mold and (3) a method for
forming an artificial reef module. Independent claims 1, 6 and 8 are further illustrative of the appealed subject matter and read as follows:

> 1. An artificial reef module for positioning on the bottom of a body of water comprising, in combination,
>
> said module having a solid filled body with a plurality of substantially solid imperforate planar faces,
>
> said body and its faces comprising a non-nesting module which, in combination with other like modules, will not nest when on the bottom of the body of water,
>
> said body being formed of concrete.
>
> 6. An artificial reef module mold, said mold comprising in combination,
>
> a plurality of triangular faces, each of which is equilateral, one of which opens upwardly.

8. A method for forming an artificial reef module out of waste material, including concrete not utilized and returned from a job site by a concrete carrier vehicle, and tire chips, comprising the steps of:

forming at least one mold, having a plurality of outstanding triangular walls,

admixing at least 25% by volume of the interior portion of said mold with tire chips and spent concrete, and

pouring said admixture into the concrete mold, whereby when the concrete mixture sets, the artificial reef module may be removed.

The references relied on by the examiner are:

Leeds et al. (Leeds)	1,812,300	Jun. 30, 1931
Harza	2,344,302	Mar. 14, 1944
Danel et al. (Danel)	2,766,592	Oct. 16, 1956
Viner	3,786,997	Jan. 22, 1974
Creter, Jr. et al. (Creter)	4,502,816	Mar. 05, 1985
Kiselewski	4,997,309	Mar. 05, 1991
Waters (filed May 16, 1989(PCT))	5,080,526	Jan. 14, 1992
Martin (parent filed Sep. 15, 1989)	5,229,051	Jul. 20, 1993

Claims 1, 2, 11 and 12 stand rejected under the judicially created doctrine of obviousness-type double patenting.

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Waters.

Claim 2 stands rejected under 35 U.S.C. § 103 as being

unpatentable over Waters in view of Martin in view of Kiselewski.

Claims 3, 10 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Waters in view of Viner.

Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Waters in view of Leeds.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Harza.[2]

Claim 7 stands rejected under 35 U.S.C. § 103 as being unpatentable over Harza in view of Creter.

Claims 8 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Harza in view of Martin, Kiselewski and Viner.[3]

---

[2] In the final rejection claim 6 was rejected under 35 U.S.C. § 103 as being unpatentable over Harza. In the answer the examiner attempted to change the statutory basis from § 103 to § 102(b) without setting forth this change as a new ground of rejection. Such a procedure on the part of the examiner is improper and, accordingly, the rejection stands as set forth in the final rejection (i.e., under 35 U.S.C. § 103 as being unpatentable over Harza).

[3] This rejection was set forth as a new ground of rejection in the answer.

Claims 11-13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Waters in view of Martin, Kiselewski and Viner.

Claims 14 and 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Danel in view of Martin and Kiselewski.

The rejection based on the judicially created doctrine of obviousness-type double patenting is explained on pages 3-7 of the final rejection. The rejections based on prior art are explained on pages 4-15 of the answer. As evidence of nonobviousness the appellant has relied on an affidavit by Benyon.

OPINION

We have carefully reviewed the appellant's invention as described in the specification, the appealed claims, the prior art applied by the examiner, the evidence of nonobviousness supplied by the appellant and the respective positions advanced by the appellant in the brief and reply brief and by the examiner

in the answer. As a consequence of this review, we will sustain the rejection of claims 1, 2, 11 and 12 under the judicially created doctrine of obviousness-type double patenting, the rejection of claim 1 under 35 U.S.C. § 102(e) and the various rejections of claims 2-6 and 8-16 under 35 U.S.C. § 103. We will not, however, sustain the rejection of claim 7 under 35 U.S.C. § 103. Additionally, pursuant to our authority under the provisions of 37 CFR § 1.196(b), we will enter a new rejection of claim 7 under 35 U.S.C. § 112, second paragraph.

Considering first the rejection of claims 1, 2, 11 and 12 under the judicially created doctrine of obviousness-type double patenting, the appellant's sole response to this rejection is that "[a]pplicant offered a terminal disclaimer to avoid" this rejection (see brief, page 8). The record dos not show that a terminal disclaimer has in fact been filed and, since the appellant has not presented any arguments as to why the examiner's position might be in error, we will sustain the rejection of claims 1, 2, 11 and 12 based on the judicially created doctrine of obviousness-type double

patenting.

Turning to the rejection of claim 1 under 35 U.S.C. § 102(e) as being anticipated by Waters, it is well settled that an anticipation under § 102 is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. ***RCA Corp. v. Applied Digital Data Systems, Inc.***, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). The law of anticipation, however, does not require that the reference teach what the appellant is claiming, but only that the claims on appeal "read on" something disclosed in the reference. ***See Kalman v. Kimberly-Clark Corp.***, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983).

According to the appellant:

> Waters illustrates one of [the] shapes typical of the prior art in Figure 1C, which figure is also cited by the Examiner. Note that Waters' Figure 1C is a modified tetrahedron, at best, but nonetheless is a "solid concrete member." The artificial reef module of applicant's claim 1 is distinguished over the tetrahedral shape in Figure 1C of Waters by the language of claim 1: "said module having a solid filled body with a plurality of substantially solid imperforate planar faces." Claim 1, lines 3-4. The description disclosed in Waters does not unambiguously describe a tetrahedron with "solid imperforate planar faces." Waters does use the term tetrahedron for artificial reef modules, but also shows that the shape of the module has been modified by rounding the corners and indenting the sides, such that the resulting shape no longer has "planar faces" and sharp corners. [Brief, page 13.]

We are unpersuaded by the appellant's arguments. While the appellant is correct in noting that the corner and edges of the tetrahedron illustrated by Waters in Fig. 1C are rounded (as distinguished from the sharp edges and corners depicted by the appellant and described by Danel with respect to a tetrahedron in the paragraph bridging columns 1 and 2), there is no claim limitation which would preclude such an arrangement. It is

well settled that features not claimed may not be relied upon in support of patentability. ***In re Self***, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982).

As to the appellant's contention that Waters does not disclose "solid imperforate planar faces," Waters states that:

> Artificial barrier reefs are in use in many areas and they are typically made up of a plurality of erosion protection units collected together to form a mass. The erosion protection units are typically ***solid concrete members***. Many different shapes of erosion protection units are produced but the most common shapes used are tetrapod and quadrapods which are illustrated in FIG. **1** of the accompanying drawings.
>
> ***Tetrahedral solid blocks*** and hollow tetrahedral blocks are also produced. [Column 1, lines 8-17; emphasis ours.]

Waters thereafter states that member 5 depicted in the prior art FIG. 1C is a "solid tetrahedron." Inasmuch as this prior art tetrahedron is "solid" and formed of concrete, we are of the opinion that Waters teaches "solid imperforate planar faces" as claimed. Although the appellant has referred to the sides of Waters' sides has being "indented," we are at a loss to

understand such a contention since Waters neither depicts nor describes the sides of the solid tetrahedron 5 as being "indented." Viewing FIG. 1C, of Waters the major portion of the sides or faces are clearly depicted as being "planar." Moreover, ***The Random House Dictionary***[4] defines a "tetrahedron" as -- 1. A solid contained by four plane faces; a triangular pyramid --. Thus, by definition the faces of a tetrahedron are "planar."

In view of the foregoing, we will sustain the rejection of claim 1 under 35 U.S.C. § 102(e) as being anticipated by Waters.[5]

Turning now to the various rejections under 35 U.S.C. § 103, we initially note that in order to establish obviousness the cited references or prior art need not expressly suggest making

---

[4] ***The Random House Dictionary of the English Language***, Second Edition-Unabridged, Random House Inc., New York, N.Y.

[5] As to the evidence of nonobviousness supplied by the appellant, we note that such evidence, no matter how striking, cannot overcome a rejection based on lack of novelty. ***See, e.g., In re Malagari***, 499 F.2d 1297, 1302, 182 USPQ 549, 553 (CCPA 1974) and ***In re Wiggins***, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973).

the combination. ***B.F. Goodrich Co. V. Aircraft Braking Systems Corp.***, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996) and ***In re Nilssen***, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988). Instead, the test for obviousness is what the
combined teachings of the references would have suggested to those of ordinary skill in the art. ***In re Young***, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and ***In re Keller***, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. ***In re Preda***, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). It is also well settled that nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. ***See In re Merck & Co. Inc.***, 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir.

1986).

Considering specifically the rejection of claim 2 under 35 U.S.C. § 103 as being unpatentable over Waters in view of Martin and Kiselewski, the appellant notes various alleged deficiencies of the references individually and urges that there is no

suggestion to combine the teachings of the references in the manner proposed by the examiner. We disagree. As we have noted above in the § 102 rejection, Waters clearly teaches a reef module in the form of a solid tetrahedron made of concrete.

Martin is directed to the making of concrete posts and suggests that as “an environmental benefit” the concrete may also include filler of “recyclable rubber, e.g. from discarded tires chipped to a size of 0.5 inch and smaller” (see column 1, lines 59 and 60). The appellant makes much of the fact that Martin utilizes a polyurethane sleeve as an outer shell for his posts, however, all of the features of the secondary reference need not be bodily incorporated into the primary

reference (***see In re Keller,*** at 642 F.2d 425, 208 USPQ 881) and the artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment (***Lear Siegler, Inc. v. Aeroquip Corp.***, 733 F.2d 881, 889, 221 USPQ 1025, 1032 (Fed. Cir. 1984). In our view, a combined consideration of Waters and Martin would have fairly suggested to one of ordinary skill in this art to utilize in the concrete tetrahedron of Waters a filler of tire chips as taught Martin in order to achieve Martin's expressly stated advantage of providing an environmental benefit by using recyclable rubber. Although the examiner has additionally relied on the teachings of Kiselewski, we see no need to resort to the teachings of this references.

From our perspective, the combined teachings of Waters and Martin establish the obviousness of the subject matter defined by claim 2 within the meaning of 35 U.S.C. § 103.

Considering next the rejection under 35 U.S.C. § 103 of claims 3, 10 and 16 as being unpatentable over Waters in view of Viner, the examiner has taken the position that it would

have been obvious to form the solid concrete tetrahedron disclosed by Waters of “waste concrete which otherwise would have to be dumped or salvaged . . .” in view of the teachings of Viner. The appellant disagrees, vigorously contending that “the essence of Viner teaches away from the using of [waste] concrete to make concrete products before solidifying” (see brief, page 22). We must point out, however, that the use of “waste” unsolidified concrete vis-à-vis “other” unsolidified concrete to form the artificial reef module is a distinction of the ***process by which the module is made*** rather than a ***structural*** distinction of the artificial reef module itself. Claims 3, 10 and 16, however, are directed to a product (i.e., an artificial reef module), and not to the method of making the product. Thus, notwithstanding the "product-by-process" terminology of utilizing “waste” concrete referenced by the appellant, the determination of patentability of these claims is based on the product itself. That is, the product defined by claims 3, 10 and 16 is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different

process. ***See In re Thorpe***, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). Moreover, even if the recitation that "waste" concrete was used to form the artificial reef modules was construed to impart a structural limitation to the claimed artificial reef module, the examiner has correctly noted that Viner in column 1, lines 16-22, clearly teaches that "unused" or "waste" concrete may be used to "make concrete products."[6] Accordingly, the combined teachings of Waters and Viner would have suggested to the artisan to make the prior art artificial reef module disclosed by Martin in FIG. 1C of "waste" concrete in view of Viner's teaching of utilizing "waste" or "unused" concrete rather than disposing of it "outside the plant area" (column 1, lines 23 and 24). While the appellant contends that Viner is primally concerned with utilizing waste concrete by forming it into layers and thereafter crushing the layers into aggregate, we must point out that patents are part of the literature of the art and are relevant for ***all*** that they contain. ***In re Lemelson***, 397 F.2d 1006, 1009, 158 USPQ

[6] We also observe that Benyon in paragraph 7 of his declaration indicates that it was known that "waste concrete may be used for oversized retaining blocks."

275, 277 (CCPA 1968). In our view, the combined teachings of Waters and Viner establish the obviousness of the subject matter defined by claims 3, 10 and 16 within the meaning of 35 U.S.C. § 103.

Turning now to the rejection of claim 4 under 35 U.S.C. § 103 as being unpatentable over Waters in view of Leeds, the appellant argues that Leeds utilizes his U-shaped hook as a bail by which the module may be conveniently transported and handled rather that removing the module from a mold. However, "[a]s long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor" ***(In re Beattie,*** 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992)) and all the utilities or benefits of the claimed invention need not be explicitly disclosed by the prior art references to render the claim unpatentable under section 103 ***(see In re Dillon***, 919 F.2d 688,
692, 696, 16 USPQ2d 1897, 1901, 1904 (Fed. Cir. 1990) (in banc), ***cert. denied***, 500 U.S. 904 (1991)). ***See also In re***

Kemps, 97 F.3d 1427, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996). Here, one of ordinary skill in this art would have found it obvious to provide the artificial reef module disclosed by Waters in FIG. 1C with a U-shaped hook in view of the teachings of Leeds in order to achieve Leeds's expressly stated advantage of conveniently handling and transporting the module (see lines 63-66 of page 1 of Leeds). Accordingly, we share the examiner's view that a combined consideration of Waters and Leeds establishes the obviousness of the subject matter defined by claim 4 within the meaning of 35 U.S.C. § 103.

Considering next the rejection of claims 5 and 6 under 35 U.S.C. § 103 as being unpatentable over Harza, the appellant argues that

> Harza envisions the placement of many single molds adjacently to each other so that concrete can be poured from a moving mixer across the molds. Harza indicates that screeding is required to ensure that the molds are filled completely so that the modules produced are all of equal size. How so many individual molds can be placed in such a fashion as to allow screeding without turning over the individual molds is not explained. The invention of claims 5 and 6 avoids numerous problems associated with Harza's teaching. First, applicant's mold is a free-standing, rigid, single

> mold that produces a plurality of artificial reef modules. Thus, stacking individual molds next to each other is unnecessary . . . . [Brief, page 27.]

It is true that Harza only states that his blocks or modules are formed "with the points downward in metal forms which can be packed continuously together . . ." (page 2, column 2, lines 62 and 63) and it is not altogether clear how the forms are "packed." We must point out, however, that independent claim 6 does not require a single mold that produces a plurality of artificial reef modules as the appellant argues. Instead, claim 6 more broadly recites a "mold" having a "plurality of triangular faces . . ." which, in our view, is fairly suggested by even a single form or mold of Harza. Even with respect to claim 5 which sets forth at least four molds "joined together at the upper portion thereof," we note that the conclusion of obviousness may be made from "common knowledge and common sense" of the person of ordinary skill in the art (***see In re Bozek***, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)) skill is presumed on the part of those practicing in the art (***see In re Sovish***, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985)). Therefore, we perceive

that the artisan would have found in obvious as a matter of "common sense" to join the "packed" forms or molds together at an upper portion thereof if, for no other reason, than to prevent them
from tipping over. This being the case, we are satisfied that a combined consideration of Waters and Harza establishes the obviousness of the subject matter defined by claims 5 and 6 within the meaning of 35 U.S.C. § 103.

Turning next to the rejection of claim 7 under 35 U.S.C. § 103 as being unpatentable over Harza in view of Creter, the examiner has relied upon Creter for a teaching of grooves. Claim 7, however, requires the grooves to be vertically oriented whereas the grooves 16 in Creter are horizontally oriented. Since we find nothing in the combined teachings of Harza and Creter which would fairly suggest vertically oriented grooves, we will not sustain the rejection of claim 7 under 35 U.S.C. § 103 based on these two references.

We now turn to the rejection of claims 8 and 9 under 35 U.S.C. § 103 as being unpatentable over Harza in view of Martin, Kiselewski and Viner. As the examiner has noted, Harza teaches that concrete modules are formed "with the

points downward in metal forms which can be packed continuously together . . .” (page 2, column 2, lines 62 and 63). Martin teaches the making of concrete posts and suggests that as “an environmental benefit” the concrete may also include filler of “recyclable rubber, e.g. from discarded tires chipped to a size of 0.5 inch and smaller” (see column 1, lines 59 and 60). Viner in column 1, lines 16-22, clearly teaches that “unused” or “waste” concrete may be used to “make concrete products.” In our view, one of ordinary skill in this art would have found it obvious to utilize tire chips in the method of Harza as taught by Martin in order to achieve Martin’s expressly stated advantage of providing an environmental benefit by using recyclable rubber. As to the particular percentage of tire chips and “spent” concrete, the selection of an optimum value for such a variable is ordinarily an obvious matter which is within the skill of the art. ***See In re Boesch***, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). Note also ***In re Woodruff***, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990). Although the examiner has additionally relied on the teachings of

Kiselewski, we see no need to resort to the teachings of this references. We are further of the view that one of ordinary skill in this art would have found it obvious to use "spent" concrete in the method Harza in light of the teaching by Viner that "unused" concrete may be used to form "concrete products" for the reasons stated above with respect to the § 103 rejection of claims 3, 10 and 16.

The appellant argues that Harza discloses that "hydrostatic pressure can easily lift and dislodge revetment blocks from an embankment. Harza, pg. 1, col. 2, lines 5-15" (reply brief, page 3) and, thus, teaches away. We must point out, however, that the noted portion of Harza refers, not to his blocks as the appellant would have us believe, but to "concrete slabs" of the prior art (see column 1, lines 39 and 54). It is also the appellant's contention that Harza's modules are not used for forming an artificial reef; however, claims 8 and 9 are directed to a method of making (rather than using) modules. In any event, the artisan would have recognized as a matter of "common sense" that Harza's modules would be useful in reef construction, particularly in view of the mention in Harza of "shore or beach protection against

waves." The appellant also argues that his modules are made without screeding, however, even if this is the case, there is no claimed limitation which would preclude screeding. Features not claimed may not be relied upon in support of patentability. ***In re Self, supra.*** It therefore follows that we are of the opinion that a combined consideration of Harza, Martin and Viner establishes the obviousness of the subject matter defined by claims 8 and 9 within the meaning of 35 U.S.C. § 103.

Considering next the rejection of claims 11-13 under 35 U.S.C. § 103 as being unpatentable over Waters in view of Martin, Kiselewski and Viner, we are of the opinion that it would have been obvious to utilize in the formation of the concrete reef module disclosed by Waters in FIG 1C disposable pieces of resilient material in view of the teachings Martin for the same reasons that we set forth above with respect to the § 103 rejection of claim 2. As in the case of the § 103 rejection of claim 2, we see no need to rely on the teachings of Kiselewski. As we have set forth above in regard to the § 103 rejection of claims 3, 10 and 16, we are of the opinion that the provision of "waste" concrete is a product-by-process

limitation which cannot serve to structurally distinguish the reef module defined by these claims over the reef module of Waters, as modified by Martin. In any event, even if the provision of "waste" concrete was deemed to be a structural limitation, we are of the opinion that it further would have been obvious to utilize "waste" concrete in the manufacture of the reef module disclosed by Waters in FIG. 1C for the same reasons we have set forth above in regard to the § 103 rejection of claims 3, 10 and 16.

Accordingly, we are of the opinion that a combined consideration of Waters, Martin and Viner establishes the obviousness of the subject matter defined by claims 11-13 within the meaning of 35 U.S.C. § 103.

Turning last to the rejection of claims 14 and 15 under 35 U.S.C. § 103 as being unpatentable over Danel in view of Martin and Kiselewski, it is the examiner's position that

> Danel discloses a solid artificial reef module made from concrete and in the form of a parallelepiped but lacks having tire chips in the concrete body. The most common parallelepipeds are cubes which by definition have planar faces intersecting with each adjacent face at an angle which is perpendicular. [Answer, page 11.]

It is thus the examiner's position that Danel suggests a

concrete module having each face intersecting with an adjacent face “at an angle which is perpendicular.” The examiner thereafter concludes that it would have been obvious to include resilient pieces of tire chips in the concrete module of Danel in view of the teachings of Martin and Kiselewski.

On the other hand, the appellant argues that:

> It is true that Danel refers to a parallelepiped in his disclosure, though perhaps he uses the term inaccurately. The blocks disclosed in the Danel’s figures do not have pairs of parallel planar surfaces, but instead have non-parallel surfaces for the purposes of creating the “necessary high proportion of voids.” Danel (col 4 lines 57-58). [Brief, page 32.]

We are unpersuaded by the appellant’s contentions. There is absolutely nothing to indicate that Danel has used the term parallelepiped “inaccurately” as the appellant would have us believe. Instead Danel utilizes the term “parallelepiped” to describe the blocks of the ***prior art***. More specifically with reference to these prior art blocks Danel states that

> Such sloping concrete structures have been constructed, for example, with blocks of concrete, which are usually given the form of a parallelepiped, because that form is very simple. [Column 1, lines 30-34.]

See also column 2 lines and 3 of Danel wherein in is stated

that “the tetrahedron blocks present the same difficulties at [sic, as] the parallelepiped blocks although in a reduced degree.”

While it is true that Danel in discussing the prior art does not expressly mention the exact kind of parallelepiped blocks, we observe that artisans must be presumed to know something about the art apart from what the references disclose. ***See In re Jacoby***, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962). Moreover, as we have noted above, the conclusion of obviousness may be made from "common knowledge and common sense" of the person of ordinary skill in the art (***see Bozek***, 416 F.2d at 1390, 163 USPQ at 549) and skill is presumed on the part of those practicing in the art ***(see Sovish***, 769 F.2d at 743, 226 USPQ at 774). Therefore, we perceive that the above-quoted portion of Danel would have fairly suggested to the artisan that such “simple” parallelepipeds would include commonplace parallelepipeds such as rectangular structures. As to the provision of the modules having pieces of resilient material such as tire chips therein, we are of the opinion that such a

provision would have been obvious in view of the teachings of Martin for essentially the same reasons set forth above with respect to the § 103 rejection of claim 2. As in the case of claim 2, we see no need to rely on the teachings of Kiselewski. In view of the above, we are of the opinion that the combined teachings of Danel and Martin establish the obviousness of the subject matter defined by claims 14 and 15 within the meaning of 35 U.S.C. § 103.

In summary, it is our conclusion that the applied reference evidence establishes the obviousness of the subject matter defined by claims 2-6 and 8-16 within the meaning of 35 U.S.C. § 103.

Having arrived at the conclusion that the evidence of obviousness as applied in the rejection of the claims on appeal
is sufficient to establish the obviousness of the subject matter defined by claims 2-6 and 8-16 within the meaning of 35 U.S.C.
§ 103, we recognize that the evidence of nonobviousness submitted by the appellant must be considered en route to a determination of obviousness/nonobviousness under 35 U.S.C.

103. ***See Stratoflex Inc. v. Aeroquip Corp***.,713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983). Accordingly, we consider anew the issue of obviousness under 35 U.S.C. 103, carefully evaluating therewith the objective evidence of nonobviousness and argument supplied by the appellant. ***See In re Piasecki,*** 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

As evidence of nonobviousness the appellant has relied on an affidavit by Benyon. While the affiant states that the company for which he works entered into an license agreement with the appellant for a reef module "disclosed in the patent application referenced above," there is nothing to indicate that the subject matter licensed was that of the ***claimed*** invention. In this regard, we observe that evidence of commercial success is relevant only if it flows from the merits of the **claimed** invention. ***Sjolund v. Musland***, 847 F.2d 1573, 1582, 6 USPQ2d
2020, 2028 (Fed. Cir. 1988). In other words, the commercial

success must be due to claimed features, and not unclaimed features. ***Joy Technologies v. Manbeck***, 751 F. Supp. 225, 231, 17 USPQ2d 1257, 1260-61 (D.D.C. 1990), ***aff'd***, 959 F.2d 226, 229, 22 USPQ2d 1153, 1156 (Fed. Cir. 1992) (features responsible for commercial success were recited only in allowed dependent claims, and therefore the evidence of commercial success was not commensurate in scope with the broad claims at issue). Moreover, the affiant provides no facts that tend to establish that the license was requested and obtained out of recognition and respect for the claimed invention as opposed to being requested and obtained for other reasons. ***EWP Corp. v. Reliance Universal, Inc.***, 755 F.2d 898, 225 USPQ 20, 26 (Fed. Cir.), ***cert. denied***, 474 U.S. 843 (1985)(license programs sometimes succeed because they are mutually beneficial to the license group or because of business judgment that it is cheaper to take licenses than to defend infringement suits, or for other reasons unrelated to the unobviousness of the licensed subject matter).

When all the evidence and argument are considered anew it is our conclusion that, on balance, the evidence and argument

presented by the appellant taken as a whole fails to outweigh the evidence of obviousness established by the prior art. ***See Newell Companies Inc. v. Kenney Manufacturing Co.***, 864 F.2d 757, 768, 9 USPQ2d 1417, 1426 (Fed. Cir. 1988) and ***In re Beattie***, 974 F.2d 1309, 1313, 24 USPQ2d 1040, 1043 (Fed. Cir. 1992). This being the case we will sustain the rejections of claims 2-6 and 8-16 under 35 U.S.C. § 103.

Under the provisions of 37 CFR § 1.196(b) we make the following new rejection.

Claim 7 is rejected under 35 U.S.C. § 112, second paragraph. In order to satisfy the second paragraph of § 112, a claim must accurately define the invention in the technical sense. ***See In re Knowlton***, 481 F.2d 1357, 1366, 178 USPQ 486, 492-93 (CCPA 1973). Moreover, while the claim language of claim 7 may appear, for the most part, to be understandable when read in abstract, no claim may be read apart from and independent of the supporting disclosure on which it is based. ***See In re Cohn***, 438 F.2d 989, 993, 169 USPQ 95, 98 (CCPA 1971). Applying these principles to the present case, we fail to understand how the plurality of grooves can be considered

to be "oriented vertically" as claimed. As depicted in FIG. 9 and described on pages 10 and 16 of the specification, the grooves line in the faces of tetrahedron and thus are at a substantial angle to the vertical. Accordingly, the language in claim 7 when read in light of the specification results in an inexplicable inconsistency that renders it indefinite.

In summary:

The rejection of claims 1, 2, 11 and 12 under the judicially created doctrine of obviousness-type double patenting is affirmed.

The rejection of claim 1 under 35 U.S.C. § 102(e) as being anticipated by Waters is affirmed.

The rejections under 35 U.S.C. § 103 of (1) claim 2 as being unpatentable over Waters in view of Waters and Kiselewski, (2) claims 3, 10 and 16 as being unpatentable over Waters in view of Viner, (3) claim 4 as being unpatentable over Waters in view of Leeds, (4) claims 5 and 6 as being unpatentable over Harza, (5) claims 8 and 9 as being unpatentable over Harza in view of Martin and Kiselewski, (6) claims 11-13 as being unpatentable over Waters in view of Martin, Kiselewski and Viner and (7) claims 14 and 15 as being

unpatentable over Danel in view of Martin and Kiselewski are all affirmed.

The rejection of claim 7 under 35 U.S.C. § 103 as being unpatentable over Harza in view of Creter is reversed.

A new rejection of claim 7 has been made under 35 U.S.C. § 112, second paragraph.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

> (b) Appellant may file a single request for rehearing within two months from the date of the original decision . . . .

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new

ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
>
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART
37 CFR § 1.196(b)

JAMES M. MEISTER Administrative Patent Judge	)	
CHARLES E. FRANKFORT Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOHN P. McQUADE Administrative Patent Judge	)	

Appeal No. 96-3404
Application 08/145,775

Jack E. Dominik
Miami Lakes Corporate Plaza
6175 N.W. 153rd Street
Suite 225
Miami Lakes, FL 33014